Author Index of Volume 74

Akhmetkhanova, F.M., 31
Asuncion, E.H., 231
Ault, B.S., 99
Avdievich, N.I., 75

Bazhin, N.M., 121, 129
Bhattacharya, S.C., 239
Bi, Y., 221
Boyatzis, S., 65

Chandrashekar, T.K., 181
Chen, L., 85
Chow, Y.L., 171

Das, H., 239
Demyashkevich, A.B., 51
Deumié, M., 255
Du, D.-M., 43
Duburs, G., 75
Dunkin, I.R., 159

El Baraka, M., 255

Fan, M., 37
Fitzwater, D.A., 91
Fouassier, J.-P., 165
Fu, D.-C., 43
Fujiwara, Y., 153

Gande, M.E., 203
Gerasimov, O.V., 21
Glinski, R.J., 91
Gollnick, K., 137
Grivin, V.P., 121, 129
Gu, W., 85

Hamanoue, K., 147
Hidaka, H., 189
Hu, J., 85

Ibuki, K., 147
Ikenaga, K., 147
Il'ichev, Yu.V., 51
Inoue, H., 211
Ishibashi, T., 15
Itoh, M., 153

Jayathirtha Rao, V., 81
Johansson, C.I., 171
Joshi, T.R., 279

Keat, L.E., 211
Klemchuk, P.P., 203
Kohtani, S., 153
Koshima, H., 43
Koval, C.A., 273
Kruppa, A.I., 75
Kumar, C.V., 231
Kuriacose, J.C., 109
Kuzmin, M.G., 51
Kuznetzova, E.P., 121, 129

Laboy, J.L., 99
Larionov, S.V., 121, 129
Lee, L.C., 1
Lemmetyinen, H., 51
Leshina, T.V., 75
Lin, N., 37
Liu, C.-Y., 267
Lūsis, V., 75
Lymar, S.V., 21

Mahipal Reddy, A., 81
Mathew, L., 109
Matsunaga, K., 211
Matsuura, T., 43

McCluskey, A., 159
Meng, J.-B., 43
Mills, C.T., 7
Ming, Y., 37
Mokrushin, V.V., 75
Morlet-Savary, F., 165
Moulik, S.P., 239
Muceniece, D., 75

Nagano, M., 153
Nakajima, A., 189
Nakayama, T., 147
Neckers, D.C., 221
Nehate, A.K., 279
Nikokavouras, J., 65
Noble, R.D., 273

Okamoto, M., 15

Park, Y.-Y., 11
Parmon, V.N., 21
Pfanner, K., 247
Phillips, L.F., 7
Plyusnin, V.F., 121, 129
Polyakov, N.E., 75

Rajaram, J., 109
Raj Gopal, V., 81
Rajput, S., 279
Rakhmankulov, D.L., 31
Ramakrishnan, V., 109
Ravikanth, M., 181
Ren, X.-M., 267

Salthammer, T., 195
Samotus, A., 115
Savita, H., 279
Schastnev, P.V., 75

Sczechowski, J.G., 273
Shan, J., 1
Sieklucka, B., 115
Song, Y., 85
Springob, C., 247
Step, E.N., 203
Suto, M., 1

Tajima, M., 211
Tanaka, F., 15
Tanimoto, Y., 153
Taraban, M.B., 75
Timpe, H.-J., 31, 165
Tokoro, M., 211
Tomiyasu, H., 11
Turner, R.S., 231
Turro, N.J., 203

Ulrich, S., 165

Wang, F., 85
Wang, H.-G., 43
Wang, R.-J., 43
Wang, W.-G., 43
Wang, Y.-M., 43
Wellnhofer, G., 137
Wolff, T., 247

Xiong, G.-X., 43

Yamashita, T., 211
Yao, S., 37
Yu, L., 37

Zang, L., 267
Zhang, X., 37
Zhu, X., 85
Zlotzkij, S.S., 31

Elsevier Sequoia

Subject Index of Volume 74

δ-Abstraction
  preparation of cyclopropanols via photoinduced δ-hydrogen abstraction in 5-acyl 1,3-dioxanes, 31
5-Acyl 1,3-dioxanes
  preparation of cyclopropanols via photoinduced δ-hydrogen abstraction in 5-acyl 1,3-dioxanes, 31
Adsorption
  adsorption of carbonate and bicarbonate on colloidal silver particles and accompanying optical effects, 267
Aerosols
  photo-oxidation of CO in a sulphuric acid aerosol, 7
Alkyl bridged porphyrins
  effect of porphyrin ring distortion on the singlet-excited state properties of alkyl-bridged, basket-handle porphyrins, 181
Amines
  photoreduction of decahydroacridine-1,8-diones by amines, 165
Argon matrices
  193 nm excimer laser photochemistry of benzene in argon matrices, 99
Aromatic aldehydes
  a multistep photoreaction of aromatic aldehydes with heteroaromatics in the solid state, 43

Basket-handle porphyrins
  effect of porphyrin ring distortion on the singlet-excited state properties of alkyl-bridged, basket-handle porphyrins, 181
Benzene
  193 nm excimer laser photochemistry of benzene in argon matrices, 99
  IR fluorescence yields from UV excitation of nitric acid, benzene, naphthalene and methyl derivatives, 1
Bicarbonate
  adsorption of carbonate and bicarbonate on colloidal silver particles and accompanying optical effects, 267
1,8-Bis[4-(α-diazobenzoyl)phenoxy]octane
  laser flash photolysis study of the primary process in 1,8-bis[4-(α-diazobenzoyl)phenoxy]octane: effects of laser and magnetic field, 153
9-Bromoanthracene
  temperature effect on the formation of the lowest excited triplet states of 9-bromoanthracene and 9,10-dibromoanthracene, 147

Carbonate
  adsorption of carbonate and bicarbonate on colloidal silver particles and accompanying optical effects, 267
Carbon monoxide
  photo-oxidation of CO in a sulphuric acid aerosol, 7
Chemically induced dynamic nuclear polarization
  the mechanisms of oxidation of NADH analogues 3. Stimulated nuclear polarization (SNP) and chemically induced dynamic nuclear polarization (CIDNP) in low magnetic fields in photo-oxidation reactions of 1,4-dihydropyridines with quinones, 75
Chemiluminescence
  lophines in micellar environments: spectroscopic behaviour and chemiluminescence, 65
Cyclodextrin
  fluorescence of 9,10-dimethylanthracene in solutions containing diisopropylnaphthaline and in solid cyclodextrin complexes, 247
Cyclohexane
  tetrachlorocyclopentadienone *O*-oxide, a facile oxygen atom transfer reagent: the oxidation of cyclohexane, 159
Cyclopropanols
  preparation of cyclopropanols via photoinduced δ-hydrogen abstraction in 5-acyl 1,3-dioxanes, 31

Dark recovery times
  evidence of critical illumination and dark recovery times for increasing the photoefficiency of aqueous heterogeneous photocatalysis, 273
Decahydroacridine-1,8-diones
  photoreduction of decahydroacridine-1,8-diones by amines, 165
3,5-Diacetyl-1,4-dihydrolutidine
  photophysical properties of 3,5-diacetyl-1,4-dihydrolutidine in solution: application to the analysis of formaldehyde, 195
Diaryliodonium salts
  photochemical reaction of halogenated xanthene dye with diaryliodonium salts, 221
9,10-Dibromoanthracene
  temperature effect on the formation of the lowest excited triplet states of 9-bromoanthracene and 9,10-dibromoanthracene, 147
1,4-Dihydropyridines
  the mechanisms of oxidation of NADH analogues 3. Stimulated nuclear polarization (SNP) and chemically induced dynamic nuclear polarization (CIDNP) in low magnetic fields in photo-oxidation reactions of 1,4-dihydropyridines with quinones, 75
Diisopropylnaphthaline
  fluorescence of 9,10-dimethylanthracene in solutions containing diisopropylnaphthaline and in solid cyclodextrin complexes, 247
9,10-Dimethylanthracene
  fluorescence of 9,10-dimethylanthracene in solutions containing diisopropylnaphthaline and in solid cyclodextrin complexes, 247
dimethyl sulfoxide
  low pressure chemiluminescent reaction of molecular fluorine with dimethyl sulfoxide and the effects of added oxygen, 91
Dithiocarbamate complexes
  photochemistry of dithiocarbamate complexes of Ni(IV) I. Processes of photoreduction of complexes, 121
  photochemistry of dithiocarbamate complexes of Ni(IV) II. Mechanism of photochromic transformations, 129
DNA double helix
  groove binding of a styrylcyanine dye to the DNA double helix: the salt effect, 231

Electron-transfer
electron-transfer-induced photo-oxygenation reactions and the special salt effect: determination of efficiencies of free radical ion formation from solvent-separated radical ion pairs in oxygen-saturated acetonitrile solutions, 137
Ethylene glycol
highly efficient hydrogen and ethylene glycol photoproduction from aqueous methanol solution by ZnS and an *in situ* spin trapping investigation, 85
Ethyl eosin
photochemical reaction of halogenated xanthene dye with diaryliodonium salts, 221
Ethyl erythrosin
photochemical reaction of halogenated xanthene dye with diaryliodonium salts, 221
193 nm excimer laser
193 nm excimer laser photochemistry of benzene in argon matrices, 99
Excited state acid catalysis
the kinetics of the interaction of singlet excited state methyl-2-naphthoate with sulfuric acid; search for excited state acid catalysis, 171
Excited state protolytic dissociation
temperature effects on excited state protolytic dissociation in aqueous solutions, micelles and liposomes: influence of phase transitions in lipid bilayers, 51
Excited uranyl
mechanism of quenching of excited uranyl ion by *N*-heteroaromatic compounds in aqueous solutions, 11

Flash photolysis
flash photolysis and time-resolved electron spin resonance studies of triplet benzophenone quenching by hindered amine light stabilizers (HALS). A comparison of HALS amines and aminoethers as electron and hydrogen atom donors, 203
generation and reactions of a transient species from $NaAlO_2$: a flash photolysis study, 109
Fluorescence
fluorescence of 9,10-dimethylanthracene in solutions containing diisopropylnaphthaline and in solid cyclodextrin complexes, 247
Formaldehyde
photophysical properties of 3,5-diacetyl-1,4-dihydrolutidine in solution: application to the analysis of formaldehyde, 195
Free radical ion
electron-transfer-induced photo-oxygenation reactions and the special salt effect: determination of efficiencies of free radical ion formation from solvent-separated radical ion pairs in oxygen-saturated acetonitrile solutions, 137

Halogenated xanthene dye
photochemical reaction of halogenated xanthene dye with diaryliodonium salts, 221
Heteroaromatics
a multistep photoreaction of aromatic aldehydes with heteroaromatics in the solid state, 43
Hindered amine light stabilizers
flash photolysis and time-resolved electron spin resonance studies of triplet benzophenone quenching by hindered amine light stabilizers (HALS). A comparison of HALS amines and aminoethers as electron and hydrogen atom donors, 203
Hydrogen
highly efficient hydrogen and ethylene glycol photoproduction from aqueous methanol solution by ZnS and an *in situ* spin trapping investigation, 85

In situ spin trapping
highly efficient hydrogen and ethylene glycol photoproduction from aqueous methanol solution by ZnS and an *in situ* spin trapping investigation, 85
IR fluorescence yields
IR fluorescence yields from UV excitation of nitric acid, benzene, naphthalene and methyl derivatives, 1

Kinetics
kinetics and mechanism for luminescence quenching of lanthanide ions by the nitrite ion in aqueous solution, 15
the kinetics of the interaction of singlet excited state methyl-2-naphthoate with sulfuric acid; search for excited state acid catalysis, 171

Lanthanide
kinetics and mechanism for luminescence quenching of lanthanide ions by the nitrite ion in aqueous solution, 15
Laser
laser flash photolysis study of the primary process in 1,8-bis[4-(α-diazobenzoyl)phenoxy]octane: effects of laser and magnetic field, 153
Laser flash photolysis
laser flash photolysis study of the primary process in 1,8-bis[4-(α-diazobenzoyl)phenoxy]octane: effects of laser and magnetic field, 153
Lipid bilayers
temperature effects on excited state protolytic dissociation in aqueous solutions, micelles and liposomes: influence of phase transitions in lipid bilayers, 51
Liposomes
temperature effects on excited state protolytic dissociation in aqueous solutions, micelles and liposomes: influence of phase transitions in lipid bilayers, 51
Lophines
lophines in micellar environments: spectroscopic behaviour and chemiluminescence, 65
Lowest excited triplet states
temperature effect on the formation of the lowest excited triplet states of 9-bromoanthracene and 9,10-dibromoanthracene, 147
Luminescence
luminescence and thermoluminescence study of polyethylene polymer (LLDPE, LDPE, HDPE), 279
Luminescence quenching
kinetics and mechanism for luminescence quenching of lanthanide ions by the nitrite ion in aqueous solution, 15

Magnetic field
laser flash photolysis study of the primary process in 1,8-bis[4-(α-diazobenzoyl)phenoxy]octane: effects of laser and magnetic field, 153
Methyl-2-naphthoate
the kinetics of the interaction of singlet excited state methyl-2-naphthoate with sulfuric acid; search for excited state acid catalysis, 171
Methyl derivatives
IR fluorescence yields from UV excitation of nitric acid, benzene, naphthalene and methyl derivatives, 1

Methyl oleate
photosensitized oxidation of oleic acid, methyl oleate, and olive oil using visible light, 189
Micelles
temperature effects on excited state protolytic dissociation in aqueous solutions, micelles and liposomes: influence of phase transitions in lipid bilayers, 51
Molecular fluorine
low pressure chemiluminescent reaction of molecular fluorine with dimethyl sulfoxide and the effects of added oxygen, 91
Multistep photoreaction
a multistep photoreaction of aromatic aldehydes with heteroaromatics in the solid state, 43

$NaAlO_2$
generation and reactions of a transient species from $NaAlO_2$: a flash photolysis study, 109
Nanosecond laser photolysis
nanosecond laser photolysis studies of photochromic processes in pyrryl fulgides, 37
Naphthalene
IR fluorescence yields from UV excitation of nitric acid, benzene, naphthalene and methyl derivatives, 1
N-heteroaromatic compounds
mechanism of quenching of excited uranyl ion by *N*-heteroaromatic compounds in aqueous solutions, 11
Nitric acid
IR fluorescence yields from UV excitation of nitric acid, benzene, naphthalene and methyl derivatives, 1
Nitrite ion
kinetics and mechanism for luminescence quenching of lanthanide ions by the nitrite ion in aqueous solution, 15

Oleic acid
photosensitized oxidation of oleic acid, methyl oleate, and olive oil using visible light, 189
Olive oil
photosensitized oxidation of oleic acid, methyl oleate, and olive oil using visible light, 189
Optical effects
adsorption of carbonate and bicarbonate on colloidal silver particles and accompanying optical effects, 267
Oxidation
tetrachlorocyclopentadienone *O*-oxide, a facile oxygen atom transfer reagent: the oxidation of cyclohexane, 159
Oxygen
low pressure chemiluminescent reaction of molecular fluorine with dimethyl sulfoxide and the effects of added oxygen, 91
Oxygen atom transfer
tetrachlorocyclopentadienone *O*-oxide, a facile oxygen atom transfer reagent: the oxidation of cyclohexane, 159

Periodate
photo-oxidation of tris(2,2′-bipyridine)-iron(II) complex by periodate in aqueous solution, 21
1-Phenoxyanthraquinones
photochromism of 1-phenoxyanthraquinones, 211
Phospholipid vesicles
self-aggregation of R110 and R123 rhodamines with surfactants and phospholipid vesicles of negative charge: a qualitative fluorescence study, 255
Photocatalysis
evidence of critical illumination and dark recovery times for increasing the photoefficiency of aqueous heterogeneous photocatalysis, 273
Photochromic process in pyrryl fulgides
nanosecond laser photolysis studies of photochromic processes in pyrryl fulgides, 37
Photochromic transformations
photochemistry of dithiocarbamate complexes of Ni(IV) II. Mechanism of photochromic transformations, 129
Photochromism
photochromism of 1-phenoxyanthraquinones, 211
Photoefficiency
evidence of critical illumination and dark recovery times for increasing the photoefficiency of aqueous heterogeneous photocatalysis, 273
Photolysis
preparation of cyclopropanols via photoinduced δ-hydrogen abstraction in 5-acyl 1,3-dioxanes, 31
Photo-oxidation
photo-oxidation of CO in a sulphuric acid aerosol, 7
photo-oxidation of tris(2,2′-bipyridine)-iron(II) complex by periodate in aqueous solution, 21
the mechanisms of oxidation of NADH analogues 3. Stimulated nuclear polarization (SNP) and chemically induced dynamic nuclear polarization (CIDNP) in low magnetic fields in photo-oxidation reactions of 1,4-dihydropyridines with quinones, 75
Photo-oxygenation
electron-transfer-induced photo-oxygenation reactions and the special salt effect: determination of efficiencies of free radical ion formation from solvent-separated radical ion pairs in oxygen-saturated acetonitrile solutions, 137
Photoreactivity $Mo(CN)_8^{3-}$
photoreactivity of $Mo(CN)_8^{3-}$ ion: photoredox and photosubstitution processes, 115
Photoredox
photoreactivity of $Mo(CN)_8^{3-}$ ion: photoredox and photosubstitution processes, 115
Photoreduction
photochemistry of dithiocarbamate complexes of Ni(IV) I. Processes of photoreduction of complexes, 121
photoreduction of decahydroacridine-1,8-diones by amines, 165
Photosensitized oxidation
photosensitized oxidation of oleic acid, methyl oleate, and olive oil using visible light, 189
Photosubstitution
photoreactivity of $Mo(CN)_8^{3-}$ ion: photoredox and photosubstitution processes, 115
Polyethylene polymer
luminescence and thermoluminescence study of polyethylene polymer (LLDPE, LDPE, HDPE), 279
Porphyrin ring distortion
effect of porphyrin ring distortion on the singlet-excited state properties of alkyl-bridged, basket-handle porphyrins, 181

Quenching
mechanism of quenching of excited uranyl ion by *N*-heteroaromatic compounds in aqueous solutions, 11

Radical ion pairs
electron-transfer-induced photo-oxygenation reactions and the special salt effect: determination of efficiencies of free radical ion formation from solvent-separated radi-

cal ion pairs in oxygen-saturated acetonitrile solutions, 137
Radical particles
the mechanisms of oxidation of NADH analogues 3. Stimulated nuclear polarization (SNP) and chemically induced dynamic nuclear polarization (CIDNP) in low magnetic fields in photo-oxidation reactions of 1,4-dihydropyridines with quinones, 75
Retinol
semiconductor photoinduced isomerization of retinol acetate and retinol, 81
Retinol acetate
semiconductor photoinduced isomerization of retinol acetate and retinol, 81
Rhodamines
self-aggregation of R110 and R123 rhodamines with surfactants and phospholipid vesicles of negative charge: a qualitative fluorescence study, 255

Safranine T
visible and fluorescence spectral studies on the interaction of safranine T with surfactant micelles, 239
Self-aggregation
self-aggregation of R110 and R123 rhodamines with surfactants and phospholipid vesicles of negative charge: a qualitative fluorescence study, 255
Semiconductor photoinduced isomerization
semiconductor photoinduced isomerization of retinol acetate and retinol, 81
Silver particles
adsorption of carbonate and bicarbonate on colloidal silver particles and accompanying optical effects, 267
Singlet excited state
effect of porphyrin ring distortion on the singlet-excited state properties of alkyl-bridged, basket-handle porphyrins, 181
the kinetics of the interaction of singlet excited state methyl-2-naphthoate with sulfuric acid; search for excited state acid catalysis, 171
Spectroscopic behaviour
lophines in micellar environments: spectroscopic behaviour and chemiluminescence, 65
Stimulated nuclear polarization
the mechanisms of oxidation of NADH analogues 3. Stimulated nuclear polarization (SNP) and chemically induced dynamic nuclear polarization (CIDNP) in low magnetic fields in photo-oxidation reactions of 1,4-dihydropyridines with quinones, 75
Styrylcyanine dye
groove binding of a styrylcyanine dye to the DNA double helix: the salt effect, 231
Sulphuric acid
photo-oxidation of CO in a sulphuric acid aerosol, 7
Surfactant micelles
visible and fluorescence spectral studies on the interaction of safranine T with surfactant micelles, 239

Temperature effects
temperature effects on excited state protolytic dissociation in aqueous solutions, micelles and liposomes: influence of phase transitions in lipid bilayers, 51
Tetrachlorocyclopentadienone *O*-oxide
tetrachlorocyclopentadienone *O*-oxide, a facile oxygen atom transfer reagent: the oxidation of cyclohexane, 159
Thermoluminescence
luminescence and thermoluminescence study of polyethylene polymer (LLDPE, LDPE, HDPE), 279
Time-resolved electron spin resonance
flash photolysis and time-resolved electron spin resonance studies of triplet benzophenone quenching by hindered amine light stabilizers (HALS). A comparison of HALS amines and aminoethers as electron and hydrogen atom donors, 203
Triplet benzophenone quenching
flash photolysis and time-resolved electron spin resonance studies of triplet benzophenone quenching by hindered amine light stabilizers (HALS). A comparison of HALS amines and aminoethers as electron and hydrogen atom donors, 203

UV excitation
IR fluorescence yields from UV excitation of nitric acid, benzene, naphthalene and methyl derivatives, 1

ZnS
highly efficient hydrogen and ethylene glycol photoproduction from aqueous methanol solution by ZnS and an *in situ* spin trapping investigation, 85